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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,414	12/20/2001	Kent A. Franklin	KCC 4785 (KC# 16,648B)	3743

321 7590 12/27/2004

SENNIGER POWERS LEAVITT AND ROEDEL  
ONE METROPOLITAN SQUARE  
16TH FLOOR  
ST LOUIS, MO 63102

EXAMINER

FISCHER, JUSTIN R

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 12/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

AS

<b>Office Action Summary</b>	<b>Application No.</b> 10/029,414	<b>Applicant(s)</b> FRANKLIN ET AL.	
	<b>Examiner</b> Justin R Fischer	<b>Art Unit</b> 1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 October 2004.  
 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 29,30 and 35-43 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 29,30 and 35-43 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
     \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>112204</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 29-30 and 35-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heikkila (WO 90/09159) in view of Blenke (US 5,500,075, of record). As best depicted in Figures 1 and 2, Heikkila is directed to a method of forming a diaper comprising applying a pair of elastic band assemblies 4, 5 (elongate member) to a liquid permeable surface layer 1, wherein each of the elastic band assemblies are formed of at least one elastic band (Page 3, Lines 30-35). Furthermore, it is evident from the above noted Figures that the securement paths of the elastic band assemblies are varied along the lateral direction of the garment and additionally, the individual elastic bands are oscillated within the securement paths to define a zigzag orientation. Thus, the securement path itself varies in the lateral direction and the arrangement of the elastic bands within the securement path varies in the lateral direction- this is consistent with the claimed invention. However, Heikkila is completely silent as to the specific method of manufacture, particularly the use of a guide assembly that varies laterally to adjust the securement path and the use of a guide that varies laterally in relation to said guide assembly to define a zigzag orientation within said securement path. In any event, one of ordinary skill in the art at the time of the invention would have found it

Art Unit: 1733

obvious to use a guide assembly and a guide in the method of Heikkila since such a method is commonly used in the arrangement of elastic strands in the manufacture of diapers, as shown for example in Blenke (Column 5, Lines 25-30, Column 8, Line 56 – Column 9, Line 10 and Figure 2B). In the method/apparatus of Blenke, a guide 44, 46 is attached to a guide assembly 47, wherein said guide is rotatably attached to said guide assembly and thus has the capability of varying the position of the elastic bands within a given securement path. It is emphasized that Blenke discloses the use of a servo motor (for the guides) that is independent of the motor used to control the positioning of the guide assembly. One of ordinary skill in the art at the time of the invention would have recognized that these methods, which are well known and extensively used in the diaper industry, would be applicable in the diaper manufacturing process of Heikkila, it being emphasized that Heikkila is completely silent as to any processing steps regarding the securement path and the zigzag orientation within the securement path.

Regarding claims 30, 39, and 40, it is evident from Figures 1 and 2 of Heikkila that the individual elastic bands have a zigzag or wave pattern within the securement path.

As to claims 35, 36, and 43, the guide assemblies are commonly rotated along an arcuate path in the arrangement of elastic strands, as expressly depicted by Blenke in Figure 2B. Also, the guide assemblies include a positioning arm that supports the guide in a spaced relation from the guide assembly, wherein the movement of the guide assembly along an arcuate path results in the lateral movement of the guide, which

Art Unit: 1733

itself is independently rotatable within the securement path- as noted above, the inclusion of a second electric motor for the guides would allow the lateral variation of the elastic strand within the securement path. It is emphasized that the second motor can work independent of the motor that provides lateral movement to the guide assembly.

With respect to claims 37 and 38, as noted above, Heikkila suggests that each of the elastic band assemblies is formed of at least one elastic band- as depicted in Figures 1 and 2, 2 elastic bands are included in each elastic band assembly. One of ordinary skill in the art at the time of the invention would have found it obvious to include a second guide in the method of Heikkila since the elastic strands of Heikkila have oscillating patterns that intersect one another. Thus, a suitable means to accommodate the different arrangements of the elastic strands within each assembly would be a second guide- in this instance, the first and second guides would be independently rotatable (with respect to the guide assembly) in order to impart a different arrangement for each elastic strand.

As to claims 41 and 42, as noted above, the guides are independently rotatable such that different wave patterns can be imparted into respective elastic strands. Absent any conclusive showing of unexpected results, it would have been within the purview of one of ordinary skill in the art at the time of the invention to provide a desired wave pattern for each of the elastic strands. With specific respect to claim 42, Figures 1 and 2 of Heikkila do show a single elastic band assembly in which a first elastic band has a negative wave pattern with respect to a second elastic band (the elastic bands have a crossed or intersecting wave pattern).

***Response to Arguments***

3. Applicant's arguments, see Pages 5 and 6, filed October 6, 2004, with respect to the rejection(s) of claim(s) 29, 30, and 35-43 under 35 U.S.C. § 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn.

However, upon further consideration, a new ground(s) of rejection is made in view of Heikkila and Blenke. In this instance, Blenke expressly recognizes the use of a motor for the guides that is independent of the motor used to laterally move the guide assembly and thus, provides the ability to laterally vary the position of the elastic strand within the securement path.

As to Heikkila, applicant contends that the elastic strands/bands of Heikkila do not have a lateral variation within the securement path. In particular, applicant argues that the "zigzag" path refers to the lateral variation of the securement path rather than the lateral variation within the securement path. However, just prior to mentioning the "zigzag path", Heikkila states that the elastic bands 4, 5 of Figure 2 have two bends- this description is seen to represent the lateral movement of the securement path. The language "zigzag path over the length of each diaper" is seen to be consistent with the Figures in describing the lateral movement of the elastic strand within the securement path. Furthermore, the sections 13 and 14 that are described as "loosely curled bands" refer to the small regions of the elastic strands (at the diaper end) that are not glued to the surface layer 1- this language does not suggest that the position of the elastic strand is constant within the securement path. Lastly, even if applicant's assertion that the

Art Unit: 1733

elastic strands are coiled (e.g. spirally oriented) is correct, such a construction satisfies the requirement that the elastic strand be laterally varied within the securement path.

***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Justin R Fischer** whose telephone number is **(571) 272-1215**. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Justin Fischer

December 22, 2004